BRUHAT BENGALURU MAHANAGARA PALIKE

YELAHANKA ZONE

NAME OF WORK : Modified Estimate for the work of IMPROVEMENTS AND ASPHALTING TO ROADS AT SHIVANAHALLI IN WARD NO.01 OF YELAHANKA SUB-DIVISION

Estimate Cost Rs. 17.93 Lakhs

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
1	KSRB 2-2.1 **Earth work excavation** for foundation of buildings, culverts water supply, sanitary line and electrical conduits either in pits or in trenches 1.5m and above in width, **in ordinary soil** not exceeding 1.5m, in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m, after breaking of clods complete as per specifications, specification, No, KBS 2.1(a) / 2.3.5, No.5/Item No. 2.3)								
		Cum							
	1st Cross Road 2nd main surabhi layout		1	30.30	0.95	0.90	25.91		
	2nd main 2nd cross		1	29.40	0.95	0.90	25.14		
	3rd cross		1	8.30	0.95	0.90	7.10		
							58.14	200.00	11628.00
	Tender Approved Rates	200.00							
2	KSRB 4-1.3 Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.85cum and fine aggregates @ 0.57cum machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No.KBS 4.1, 4.2 (P.12/I.4.3)								
		Cum							
	1st Cross Road 2nd main surabhi		1	30.30	0.95	0.15	4.32		
	2nd main 2nd cross		1	29.40	0.95	0.15	4.19		
	3rd cross		1	8.30	0.95	0.15	1.18		
							9.68	5159.00	49939.00
	Tender Approved Rates	5159.00							
3	KSRB 4.9.2 Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost pf materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 -do- TMT Bars Fe 500 P.17/It.No.4.46.2								
		tonne	No.of Bars	Width/Lengt	Rmtr	Kg/Rmtr	Total in Kg		
	12mm dia main bar spacing at 150mm c/c	1	453	2.10	951.30	0.888	844.75		
	10mm dia dist bar spacing at 150mm c/c	1	14	30.30	424.20	0.617	261.73		
						in tonne	1.4323	59413.00	85127.00
	Tender Approved Rates	59413.00							
4	KSRB 4-6.4 Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.21 (P.15 / I.4.31)								
		Sqm							
			2x2	30.30		0.60	72.72		
			2x2	29.40		0.60	70.56		
			2x2	8.30		0.60	19.92		

	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
							163.20	310.00	50592.00
	Tender Approved Rates	310.00							
	Providing & laying in position reinforced cement concrete of Design mix M20 with OPC cement @ 320kgs , with 20mm and down size graded granite metal,coarseaggregated @ 0.69cum ,and fine aggregated @ 0.460cum, with superplastisiser @ 3lts confirming to IS9103-1999 Reaffirmed -2008 machine mixed concrete laid in layers not exceeding 15 crns thick, vibrated for all works in foundation for footings,pedestals,retaining walls, return walls, walls (any thickness) including attached plasters, columns, piers, abutments, pillars, posts,struts, buttresses, bed blocks, anchor blocks, plinths etc.,including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications specifications No.KBS 4.1,4.6 (P No.13/ I No.4.11)								
		Cum							
	wall		2	30.30	0.15	0.60	5.45		
			2	29.40	0.15	0.60	5.29		
			2	8.30	0.15	0.60	1.49		
	bed		1	30.30	0.95	0.15	4.32		
			1	29.40	0.95	0.15	4.19		
			1	8.30	0.95	0.15	1.18		
							21.93	6371.00	139703.00
	Tender Approved Rates	6371.00							
6	Providing and fixing **RCC precast Slabs of 0.10 m thick of CC 1:2:4 with 20 mm** and down size graded granite metal , machine mixed , including cost of all material , labour , HOM of Machinery , curing complete								
	Shivanahalli 2nd Stage	Sqm							
			1	30.30	0.90		27.27		
			1	29.40	0.90		26.46		
			1	8.30	0.90		7.47		
			1	3.00	0.90		2.70		
							63.90	2100.00	134190.00
	Tender Approved Rates	2100.00							
7	KSRB 2-1.1 : Earthwork in surface excavation in **ordinary soil** for **levelling and lowering** the ground manually (other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1.5m, excavated surface leveled and neatly dressed, disposed earth to be leveled after breaking of clods and neatly dressed as per specifications specification No. KBS 2.1 (a) / 2.3.1 (P.5/I.2.1)								
		Cum							
	1st cross 2nd main surabhi layout		1	28.50	6.35	0.25	45.24		
	2nd cross		1	30.80	5.65	0.25	43.51		
	4th cross		1	31.00	5.35	0.25	41.46		
			1	33.00	5.35	0.25	44.14		
	2nd main dead end		1	29.00	4.95	0.25	35.89		
			1	11.00	3.55	0.25	9.76		
	entrance		1	20.00	4.95	0.25	24.75		
							244.75	166.00	40628.00
	Tender Approved Rates	166.00							

	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
	KSRRB M100-1 Loading and Unloading of Stone Boulder / Stone aggregate /sand/kaner/ Moorum KSRRB M100-1 Placing tipper at loading point, loading with front end loader, dumping, turning for return trip, excluding time for haulage and return trip complete as per specifications MORTH -100/ Chapter 1 (Page No.133/ Item No 17.1)								
		Cum							
			Qty Vide Item No.1+7				302.89	100.00	30289.00
	Tender Approved Rates	100.00							
9	**Cleaning the existing black topped surface** with brooms, soft brushes and finally dusting with old gunny bags and /or compressed air to recieve bituminous treatment , including cost of all materials, labour, HOM of machineries complete as per Specifications. (P.No.157 & I.No.21.2)								
		Sqm							
	Not Executed								
10	KSRRB M400-6 1 Construction of granular sub-base by providing close graded material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method Close graded granular sub-base material as per 400-1 For Grading- II Material (P.No.155 It.No.20.4.2)								
		Cum							
	1st cross 2nd main surabhi layout		1	28.50	6.35	0.15	27.15		
	2nd cross		1	30.80	5.65	0.15	26.10		
	4th cross		1	31.00	5.35	0.15	24.88		
			1	33.00	5.35	0.15	26.48		
	2nd main dead end		1	29.00	4.95	0.11	15.07		
			1	11.00	3.55	0.15	5.86		
	entrance		1	20.00	4.95	0.15	14.85		
							140.39	1665.00	**233749.00**
	Tender Approved Rates	1665.00							
11	KSRRB M400- Wet Mix Macadam - KSRRB M400-17. Providing, laying, spreading and compacting graded stones aggregate to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications MORTH Specification No. 406 (P.No.158 I.No.20.18)								
		Cum							
	1st cross 2nd main surabhi layout		1	28.50	6.35	0.20	36.20		
	2nd cross		1	30.80	5.65	0.20	34.80		
	4th cross		1	31.00	5.35	0.20	33.17		
			1	33.00	5.35	0.20	35.31		
	2nd main dead end		1	29.00	4.95	0.20	28.71		
			1	11.00	3.55	0.20	7.81		
	entrance		1	20.00	4.95	0.20	19.80		
							195.80	1768.00	**346173.00**

	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
	Tender Approved Rates	1768.00							
	Providing and applying primer coat with ss bitumen emulsion on prepared surface of granular base such as WMM including clearing of road surface and spraying primer at the rate of 0.60 kg/sqm using mechanical means complete as per specifications. MORTH Specification No.502 (P.No.160/It No.21.6)								
		Cum							
	1st cross 2nd main surabhi layout		1	28.50	6.35		180.98		
	2nd cross		1	30.80	5.65		174.02		
	4th cross		1	31.00	5.35		165.85		
			1	33.00	5.35		176.55		
	2nd main dead end		1	29.00	4.95		143.55		
			1	11.00	3.55		39.05		
	entrance		1	20.00	4.95		99.00		
							0.00		
							979.00	27.00	26433.00
	Tender Approved Rates	27.00							
13	KSRRB M500- 15. Providing, laying dense graded bituminous macadam using 40/60 TPH capacity H M P with Mechanical paver Gr-II (50mm to 75mm), crushed aggregates of specified grading premixed with 4.5% VG 30 grade bituminous binder and , transporting the hot mix to work site , laying to the required level and grade, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications MORTH Specification No.507 (P.No.162&163 It.No.21.17.6)								
		Cum							
	1st cross 2nd main surabhi layout		1	28.50	6.35	0.050	9.05		
	2nd cross		1	30.80	5.65	0.050	8.70		
	4th cross		1	31.00	5.35	0.050	8.29		
			1	33.00	5.35	0.050	8.83		
	2nd main dead end		1	29.00	4.95	0.050	7.18		
			1	11.00	3.55	0.050	1.95		
	entrance		1	20.00	4.95	0.050	4.95		
	corner		1	5.00	6.20	0.050	1.55		
							50.50	6435.00	324966.00
	Tender Approved Rates	6435.00							
14	KSRRB 500-7 Providing and **applying tack coat with bitumen emulsion** using 80/100 grade bitumen (VG20) on the prepared black toped suface at 2.5kg per 10 sqm, heating bitumen in boiler fitted with spray set (Excluding cleaning of road surface) including cost of all materials, labour, HOM of Machineries complete as per Specifications.(P.No.160 & I.No.21.7)								
		Sqm							
	1st cross 2nd main surabhi layout		1	28.50	6.35		180.98		
	2nd cross		1	30.80	5.65		174.02		
	4th cross		1	31.00	5.35		165.85		
			1	33.00	5.35		176.55		

	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
	nd main dead end		1	29.00	4.95		143.55		
			1	11.00	3.55		39.05		
	entrance		1	20.00	4.95		99.00		
	Tender Approved Rates	14.00					979.00	14.00	13706.00
5	KSRRB M500- 15 Providing, laying bituminousConcrete using 40/60 THP capacity H.M.P with Mechanical paver Gr-II (30mm to 45mm), crushed aggregates of specified grading premixed with 6% VG 30 grade bituminous binder and , transporting the hot mix to work site , laying to the required level and grade,rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH Specification clause No 500 9 complete in all respects complete as per specifications MORTH Specification No 509 (P No.164 Item No.21.22.6)								
		Cum							
	1st cross 2nd main surabhi layout		1	28.50	6.35	0.040	7.24		
	2nd cross		1	30.80	5.65	0.040	6.96		
	4th cross		1	31.00	5.35	0.040	6.63		
			1	33.00	5.35	0.040	7.06		
	2nd main dead end		1	29.00	4.95	0.040	5.74		
			1	11.00	3.55	0.040	1.56		
	entrance		1	20.00	4.95	0.040	3.96		
							39.16	7270.00	284692.00
	Tender Approved Rates	7270.00							
16	KSRRB M800-13 Road marking with hot applied thermoplastic compound with reflect rising glass beads on bituminous surface- providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface to level, uniform and free from streaks and holes complete as per specifications. MORTH specification No. 803, No. 1974 (P.No.181 & I.No.24.15)								
		Sqm							
			2.5	183	0.10		45.83		
							45.83	464.00	21263.00
	Tender Approved Rates	464.00							
17	Miscellaneous and unforeseen charges	LS							
							Grand Total Amount		1793047.00

(Rupees Eighteen Lakhs Only)

Assistant Engineer
Ward No.01

Assistant Executive Engineer
Yelahanka Sub-Division
B.B.M.P

Executive Engineer
Yelahanka Division
B.B.M.P

Technical Sanction
Accorded For Rs.1793047/-
Head of A/C.8121.....
CER NO :...01..... Dt:24.04.2015

TA CE (YNK).